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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,583	06/21/2001	Ferdinand Schmidt	6171-2	7022

21324 7590 07/10/2003

HAHN LOESER & PARKS, LLP
TWIN OAKS ESTATE
1225 W. MARKET STREET
AKRON, OH 44313

EXAMINER

RUTHKOSKY, MARK

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 07/10/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/831,583

Applicant(s)

SCHMIDT ET AL.

Examiner

Mark Ruthkosky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8,9,11-13,17 and 19 is/are rejected.
- 7) ☐ Claim(s) 6,7,10,14-16,18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Priority

The application is a 371 of PCT/EP99/07961. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the parent.

Information Disclosure Statement

The information disclosure statement filed 6/21/2001 has been placed in the application file, and the information referred to therein has been considered as to the merits.

Drawings

The drawings filed on 6/21/2001 have been approved.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 5, 8, 9, 11, 12, 13, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohmura et al. (WO 95/11527) AND under 35 U.S.C. 102(e) as being anticipated

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by Ohmura et al. (US 5,993,994.) As the Ohmura et al. (US 5,993,994) reference is a 371 continuation of the Ohmura et al. (WO 95/11527) reference, the rejection will be discussed with regard to the Ohmura et al. (US 5,993,994) U.S. patent as it is in English.

The instant claims are to a battery sheath made of formed cold-rolled sheet metal comprising at least on an inside surface thereof with an electroplated coating selected from a group of metals consisting of Ni, Co, Fe, Sn, In, Pd, Bi and alloys thereof wherein electrically conductive particles are embedded in dispersed form in the electroplated coating.

Ohmura et al. teaches a cold-rolled metal sheet comprising at least on an inside surface thereof with an electroplated coating selected from a group of metals consisting of Ni, Co, Fe, Sn, In, Pd, Bi and alloys thereof (see example 1.) As the coating consists of electrically conductive particles, the particles are considered to be embedded in dispersed form in the electroplated coating. The instant claims do not differentiate the identity of the particles other than to say they are conductive. Nickel-tin layers are also noted. The nickel plating is about 2 μm . The electroplating method includes agitation of the materials. Stabilizers and brighteners are noted. Thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-3, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okayama et al. (10-012,199.)

Okayama et al. (10-012,199) teaches a cold-rolled metal battery sheath including a nickel-tin alloy plated on the inner surface of the metal can. A conductive film comprising mainly graphite is formed on the nickel-tin alloy. From this, it is noted that the film will have a majority of graphite. An example states that the thickness of the plated film is about 0.5 mm (paragraph. 3.) The reference does not teach the graphite layer to be embedded into the surface of the nickel-tin alloy. It would be obvious to one of ordinary skill in the art at the time the invention was made to incorporate particles of the conductive graphite film of Okayama et al. (10-012,199) into the nickel-tin alloy plated on the inner surface of the metal can as the benefits of the graphite material are taught in the reference. One of ordinary skill in the art would recognize that a mixture of the conductive film with the plated layer will provide an equivalent function of conducting electrons and improving the electrical resistance of the battery can as taught in the art by Okayama et al. (10-012,199.) The artisan would have found the claimed invention to be obvious in light of the teachings of the reference.

Allowable Subject Matter

Claims 6, 7, 10, 14-16, 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 6, the prior art doesn't teach a process where carbon is suspended in an

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electroplating bath. With regard to claim 10, the prior art doesn't teach a process where the forced flow velocity of the electrolyte is 6-10 m/s. With regard to claim 14, the prior art doesn't teach a process as claimed including carbon. With regard to claim 18, the prior art doesn't teach a process as claimed including 15% elemental carbon. With regard to claim 18, the prior art doesn't teach a process as claimed including the specified materials.

Examiner Correspondence

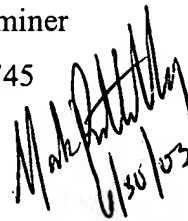
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 703-305-0587. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:00.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 703-308-2383.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Mark Ruthkosky

Patent Examiner

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Handwritten signature of Mark Ruthkosky and date 6/20/03.